WHAT IS CLAIMED IS:

1. An optical disk apparatus comprising:

a rotating section configured to rotate an optical disk;

a reading section configured to irradiate a laser beam on the optical disk, to receive a reflected beam reflected from the optical disk, and to output an RF signal in which being modulated in accordance with a modulation of the reflected beam;

an equalizer section configured to adjust a frequency characteristic of the RF signal output from the reading section, based on a cutoff frequency and a boost amount which are previously set;

a reproducing section configured to generate and output a reproduced signal from the RF signal adjusted by the equalizer section;

a jitter detecting section configured to detect a jitter with respect to the RF signal output from the reading section at a time when the rotating section starts rotating the optical disk and a rotational speed (Va) of the optical disk not being reached to a predetermined rotational speed (Vb); and

a setting section configured to calculate a cutoff frequency (Fca) for optimizing the jitter in which detected by the jitter detecting section, and to calculate and set

a cutoff frequency (Fc) for optimizing the jitter with respect to the RF signal output from the reading section at a time when the optical disk being rotating at the predetermined rotational speed, based on the cutoff frequency (Fca), the rotational speed (Va), the predetermined rotational speed (Vb), and a preset proportionality factor (k), by use of the following equation:

$$Fc = Fca + k(Vb - Va),$$

wherein the equalizer section adjusts the frequency characteristic of the RF signal output from the reading section on the basis of the cutoff frequency (Fc) set by the setting section, and

wherein the reproducing section starts to generate and output the reproduced signal immediately after the jitter is detected by the jitter detecting section.

2. An optical disk apparatus comprising:

a rotating section configured to rotate an optical disk;

a reading section configured to irradiate a laser beam on the optical disk, to receive a reflected beam reflected from the optical disk, and to output an RF signal in which being modulated in accordance with a modulation of the reflected beam;

an equalizer section configured to adjust a frequency

characteristic of the RF signal output from the reading section, based on a cutoff frequency and a boost amount which are previously set;

a reproducing section configured to generate and output a reproduced signal from the RF signal adjusted by the equalizer section;

a jitter detecting section configured to detect a jitter with respect to the RF signal output from the reading section at a time when the rotating section starts rotating the optical disk and a rotational speed (Va) of the optical disk not being reached to a predetermined rotational speed (Vb); and

a setting section configured to calculate a cutoff frequency (Fca) for optimizing the jitter in which detected by the jitter detecting section, and to calculate and set a cutoff frequency (Fc) for optimizing the jitter with respect to the RF signal output from the reading section at a time when the optical disk being rotating at the predetermined rotational speed, based on the cutoff frequency (Fca), the rotational speed (Va), the predetermined rotational speed (Vb), and a preset proportionality factor (k),

wherein the equalizer section adjusts the frequency characteristic of the RF signal output from the reading section on the basis of the cutoff frequency (Fc) set by

the setting section.

3. The optical disk apparatus as claimed in claim 2, wherein the reproducing section starts to generate and output the reproduced signal immediately after the jitter is detected by the jitter detecting section.

4. The optical disk apparatus as claimed in claim 2, wherein the setting section calculates the cutoff frequency (Fc) for optimizing the jitter with respect to the RF signal output from the reading section at a time when the optical disk being rotating at the predetermined rotational speed by use of the following equation:

$$Fc = Fca + k(Vb - Va).$$